

## **GENERAL NOTES**

- ALL PLANS & CONSTRUCTION SHALL BE IN ACCORDANCE WITH CURRENT ROSS COUNTY, DEPARTMENT OF VETERANS AFFAIRS RFP, AND APPLICABLE OHIO
- CONTRACTOR SHALL OBTAIN A PERMIT FOR ALL CONSTRUCTION ACTIVITIES IN ACCORDANCE WITH DEPARTMENT OF VETERANS AFFAIRS.
- ITEM NUMBERS REFER TO THE OHIO DEPARTMENT OF TRANSPORTATION CONSTRUCTION AND MATERIAL SPECIFICATIONS. ALL CONSTRUCTION WORK SHALL
- 4. ALL DIMENSIONS ARE TO THE EDGE OF PAVEMENT AND/OR FACE OF CURB, UNLESS OTHERWISE NOTED.
- 5. ALL STRIPING COLOR AND WIDTH SHALL BE PER THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
- 6. CONCRETE WALKS SHALL BE 4" THICK WITH CONTROL JOINTS EQUALLY SPACED AT NO MORE THAN 6' ON CENTER.
- 7. ALL CATCH BASIN GRATES LOCATED WITHIN PAVEMENT OR SIDEWALK AREAS SHALL CONFORM TO ADA REQUIREMENTS
- 8. CONTRACTOR TO REPLACE ANY PAVEMENT OR UTILITIES DAMAGED WHICH ARE NOT SPECIFIED TO BE REMOVED ON THESE PLANS.

## **GRADING NOTES**

- 1. CONTRACTOR TO REMOVE TREES AND CLEAR AREAS AS NECESSARY TO PERFORM ALL SITE WORK INCLUDING GRADING AND UTILITY WORK.
- 2. PROTECTION OF EXISTING TREES AND VEGETATION: PROTECT EXISTING TREES AND OTHER VEGETATION INDICATED TO REMAIN IN PLACE AGAINST UNNECESSARY CUTTING, BREAKING OR SKINNING OF ROOTS, SKINNING OR BRUISING OF BARK, SMOTHERING OF TREES BY STOCKPILING CONSTRUCTION MATERIALS OR EXCAVATED MATERIALS WITHIN DRIP LINE, EXCESS FOOT OR VEHICULAR TRAFFIC, OR PARKING OF VEHICLES WITHIN DRIP LINE. PROVIDE TEMPORARY GUARDS TO PROTECT TREES AND VEGETATION TO BE LEFT STANDING.
- 3. ALL ELEVATIONS SHOWN ARE FINISHED GRADE ELEVATIONS.
- 4. SITE BUILDING PAD EXCAVATION AND CONSTRUCTION TO BE PER GEOTECHNICAL ENGINEER'S RECOMMENDATIONS. BUILDING PAD PREPARATION SHALL BEGIN BY CLEARING & STRIPPING UNSUITABLE MATERIAL FROM PAD SITE. THEN PLACE & COMPACT BACKFILL MATERIAL AT GEOTECHNICAL ENGINEER'S AND ARCHITECT'S RECOMMENDATIONS. ALL BACKFILL MATERIAL MUST BE ACCEPTABLE TO THE GEOTECHNICAL ENGINEER.
- 5. ALL FILL UNDER PAVEMENT SHALL BE COMPACTED TO THE GEOTECHNICAL ENGINEER'S RECOMMENDATIONS.
- 6. CONTRACTOR SHALL IMPLEMENT ALL SOIL AND EROSION CONTROL, PRACTICES REQUIRED BY ROSS COUNTY, AND THE OHIO EPA.
- 7. ALL GROUND SURFACE AREAS THAT HAVE BEEN EXPOSED OR LEFT BARE AS A RESULT OF CONSTRUCTION AND ARE TO FINAL GRADE AND ARE TO REMAIN SO, SHALL BE SEEDED AND MULCHED AS SOON AS PRACTICAL IN ACCORDANCE WITH ODOT ITEM 659.
- 8. CONTRACTOR TO REMOVE & REPLACE PAVEMENT AS SPECIFIED ON PLANS.

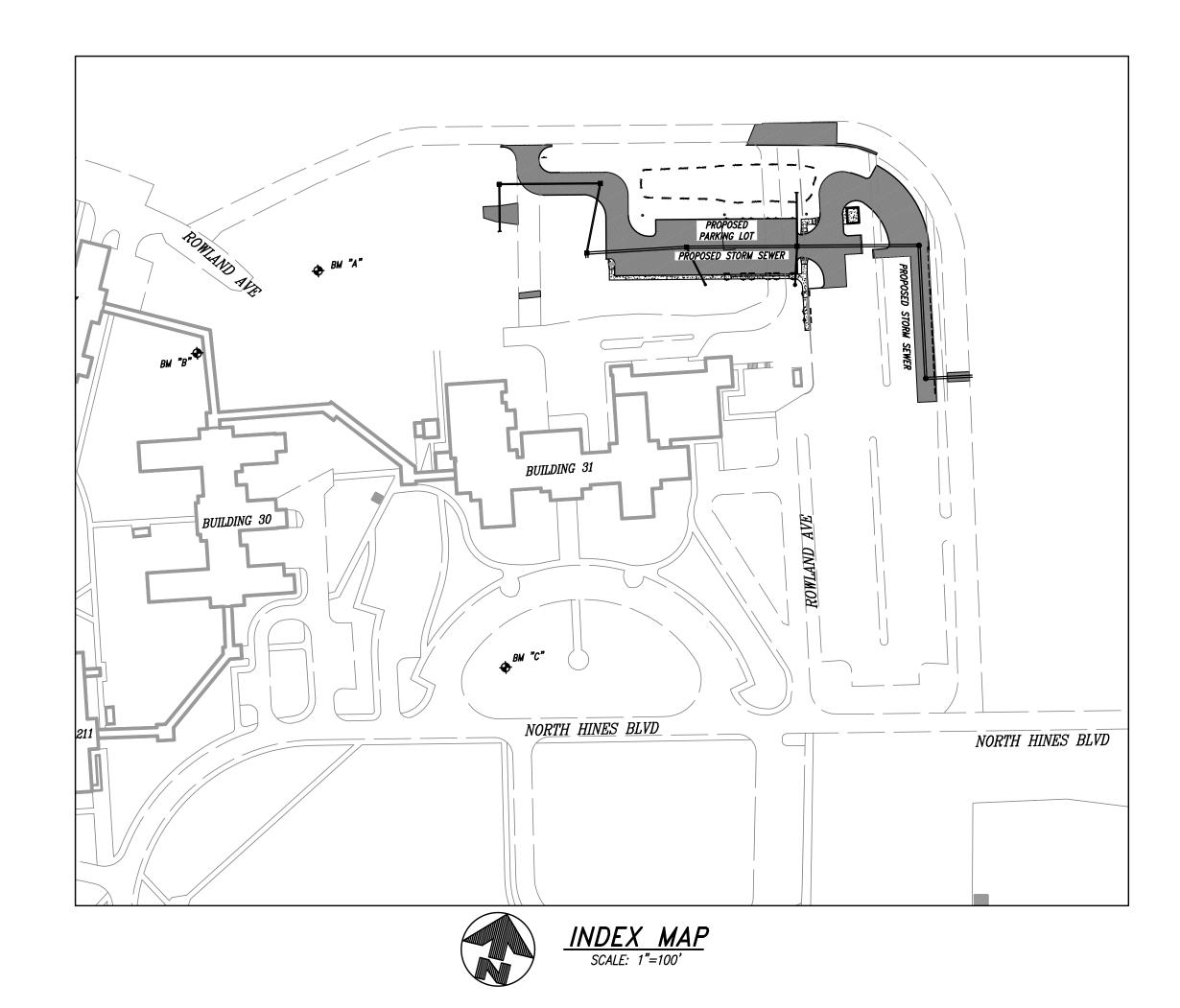
# <u>UTILITY NOTES</u>

- COMPACTED FILLS ARE TO BE MADE TO A MINIMUM OF THREE FEET ABOVE THE CROWN OF ANY PROPOSED SEWER PRIOR TO CUTTING OF TRENCHES FOR PLACEMENT OF SAID SEWERS. ALL FILLS SHALL BE CONTROLLED, COMPACTED, AND INSPECTED BY AN APPROVED TESTING LABORATORY OR AN INSPECTOR FROM THE APPROPRIATE GOVERNMENTAL AGENCY.
- 2. ADJUST ALL EXISTING CASTINGS AND CLEANOUTS WITHIN PROJECT AREA TO GRADE AS REQUIRED.
- 3. ALL PROPOSED STORM SEWERS, SURFACE OR OTHER DRAINAGE FACILITIES ARE TO BE PRIVATE AND MAINTAINED BY THE OWNER. EROSION CONTROL MEASURES MUST PROVIDE PROTECTION UNTIL COMPLETION OF THE PROJECT AND VEGETATIVE STABILIZATION.
- 4. THE CONTRACTOR IS TO CONSTRUCT CURBS, CATCH BASINS, DOWNSPOUTS, PIPING AND CONNECTIONS ETC. AS REQUIRED TO CONVEY THE ROOF AND PAVED SURFACE DRAINAGE TO THE DETENTION BASIN.
- 5. ALL STORM STRUCTURES ARE ODOT TYPES UNLESS OTHERWISE INDICATED.
- 6. STORM SEWER PIPE SHALL BE ONE OF THE FOLLOWING: PVC SDR-35, HIGH DENSITY POLYETHYLENE PER ODOT ITEM 707.33, CORRUGATED METAL PIPE PER ODOT ITEMS 707.01, 707.02, OR REINFORCED CONCRETE PIPE PER ODOT ITEM 706.02, CLASS IV OR 706.04. STORM SEWER PIPE LABELED "RCP", REGARDLESS OF SIZE, SHALL BE REINFORCED CONCRETE PIPE PER ODOT ITEM 706.02, CLASS IV OR 706.04.
- 7. ALL CATCH BASINS IN THE PAVEMENT ARE TO HAVE 4, 4" PERFORATED UNDERDRAINS EXTENDING 12 LF FROM THE CATCH BASIN IN THE UPHILL DIRECTION AND CAPPED. ALL CATCH BASINS IN THE CURB ARE TO HAVE 2, 4" PERFORATED UNDERDRAINS EXTENDING 12 LF FROM THE CATCH BASIN IN THE UPHILL DIRECTION AND CAPPED.
- 8. ANY FIELD TILE CUT IN EXCAVATION WHICH DRAINS IN AN OFFSITE AREA MUST BE TIED INTO THE STORM DRAINAGE SYSTEM.
- 9. FOR EXACT LOCATION OF DOWN SPOUTS & ROOF DRAINS, COORDINATE WITH CONSTRUCTION MANAGER. ALL ROOF DRAINS ARE TO BE 8" UNLESS OTHERWISE NOTED.
- 10. ALL CATCH BASINS WITH DEPTH GREATER THAN 4.5' SHALL BE PROVIDED WITH STEPS. STEPS SHALL MEET THE REQUIREMENTS OF ODOT ITEM 604.
- 11. SANITARY SERVICE SHALL INSTALLED AT A MINIMUM SLOPE OF 2.08%, UNLESS OTHERWISE NOTED. THE SANITARY SERVICE SHALL CONFORM TO RULES AND REGULATIONS OF ROSS COUNTY. SANITARY SERVICE SHALL BE INSTALLED AT A MINIMUM DEPTH OF FOUR FEET (4') UNLESS OTHERWISE NOTED. A MINIMUM OF 18" CLEARANCE SHALL BE MAINTAINED AT ALL WATERLINE CROSSINGS. SANITARY SERVICE JOINTS SHALL CONFORM TO ASTM D-3212.
- 12. SANITARY SEWER IS TO BE BEDDED WITH CLEAN GRANULAR MATERIAL—AGGREGATES NOT TO BE LARGER THAN 3/4" AND NOT SMALLER THAN NO. 8 SIEVE, FREE OF SILT AND FINES, AASHTO M43 SIZE #67, 7 OR 8. BEDDING TO BE MINIMUM OF 6" BELOW & 12" ABOVE THE PIPE.
- 13. ALL MANHOLES WITH A DEPTH GREATER THAN 4' SHALL BE PROVIDED WITH STEPS. STEPS SHALL MEET THE REQUIREMENTS OF ODOT ITEM 604.
- 14. DISTANCES SHOWN FOR BOTH SANITARY AND STORM SEWER PIPES ARE MEASURED FROM CENTER OF STRUCTURE. CONTRACTOR RESPONSIBLE FOR ACTUAL FIELD CUT LENGTH. COORDINATES FOR STORM & SANITARY STRUCTURES ARE SHOWN TO THE CENTER OF STRUCTURE UNLESS OTHERWISE NOTED.
- 15. ROOF DRAINS, FOUNDATION DRAINS AND ALL OTHER CLEAR WATER CONNECTIONS TO THE SANITARY SEWER SYSTEMS ARE PROHIBITED.
- 16. THE CONTRACTOR SHALL VERIFY LOCATION AND ELEVATION OF ALL EXISTING UTILITIES PRIOR TO THE BEGINNING OF CONSTRUCTION OR EARTH MOVING OPERATIONS.
- 17. SITE CONTRACTOR SHALL BRING SANITARY SEWER TO WITHIN 5' OF THE OUTSIDE WALL. COORDINATE LOCATION WITH CONSTRUCTION MANAGER.
- 18. ALL YARD DRAINS SHALL BE ONE OF THE FOLLOWING: NYLOPLAST—ADS DRAIN BASIN, NDS DURACAST FABRICATED PVC CATCH BASIN, AGRI—DRAIN CATCH BASIN, OR APPROVED EQUAL.

**CONSULTANTS:** 

# DEPARTMENT OF VETERANS AFFAIRS MEDICAL CENTER CONSTRUCT PARKING LOT

17273 STATE ROUTE 104 CHILLICOTHE, OH 45601



## INDEX OF SHEETS

C100 - TITLE SHEET C101 - DEMOLITION PLAN

C102 — LOCATION PLAN

C103 — UTILITY PLAN C104 — GRADING PLAN AND EROSION CONTROL PLAN

C105 — STORM SEWER PROFILES

C106 — EROSION CONTROL NOTES AND DETAILS

C107 — SITE LIGHTING PLAN

L101 — LANDSCAPE PLAN

<u>BM "A"</u> BOX CUT ON SOUTHEAST CORNER OF GENERATOR PAD, LOCATED ELEV. 673.39

**BENCHMARKS** 

BOX CUT ON FLAG POLE PAD, LOCATED SOUTH OF BUILDING 31.

## BASIS OF BEARINGS

BEARINGS ARE BASED ON THE OHIO STATE PLANE COORDINATE SYSTEM, OHIO SOUTH ZONE (NAD83-CORS), AS DETERMINED BY A GPS SURVEY UTILIZING ODOT CORS STATION OHRO AS MAINTAINED BY THE OHIO DEPARTMENT OF TRANSPORTATION.

## <u>DATUM</u>

VERTICAL DATUM IS NAVD 1988 BASED ON BENCHMARK U186.

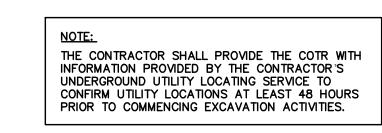
## SITE SURVEY

TOPOGRAPHIC INFORMATION BASED ON SURVEY COMPLPETED BY KLEINGERS & ASSOCIATES IN 2010. EXISTING AND PROPOSED ELEVATION INFORMATION REQUIRED FOR THE PROJECT IS SHOWN ON SHEET C105.

## **APPROVALS**

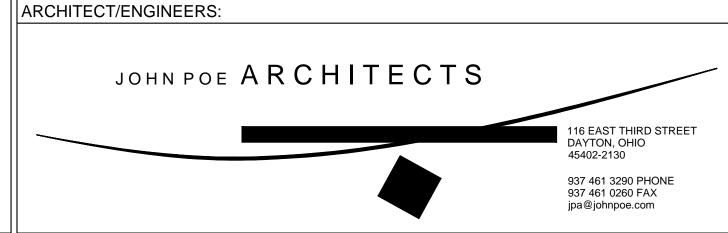
UNDERGROUND UTILITIES

UNDERGROUND UTILITIES ARE PLOTTED FROM A COMPILATION OF RECORD INFORMATION AND SURFACE INDICATIONS OF UNDERGROUND STRUCTURES. EXACT LOCATIONS CANNOT BE VERIFIED.









TITLE SHEET

roved: Project Director

VAMC Chillicothe Construct Parking Lot

Chillicothe, Ohio

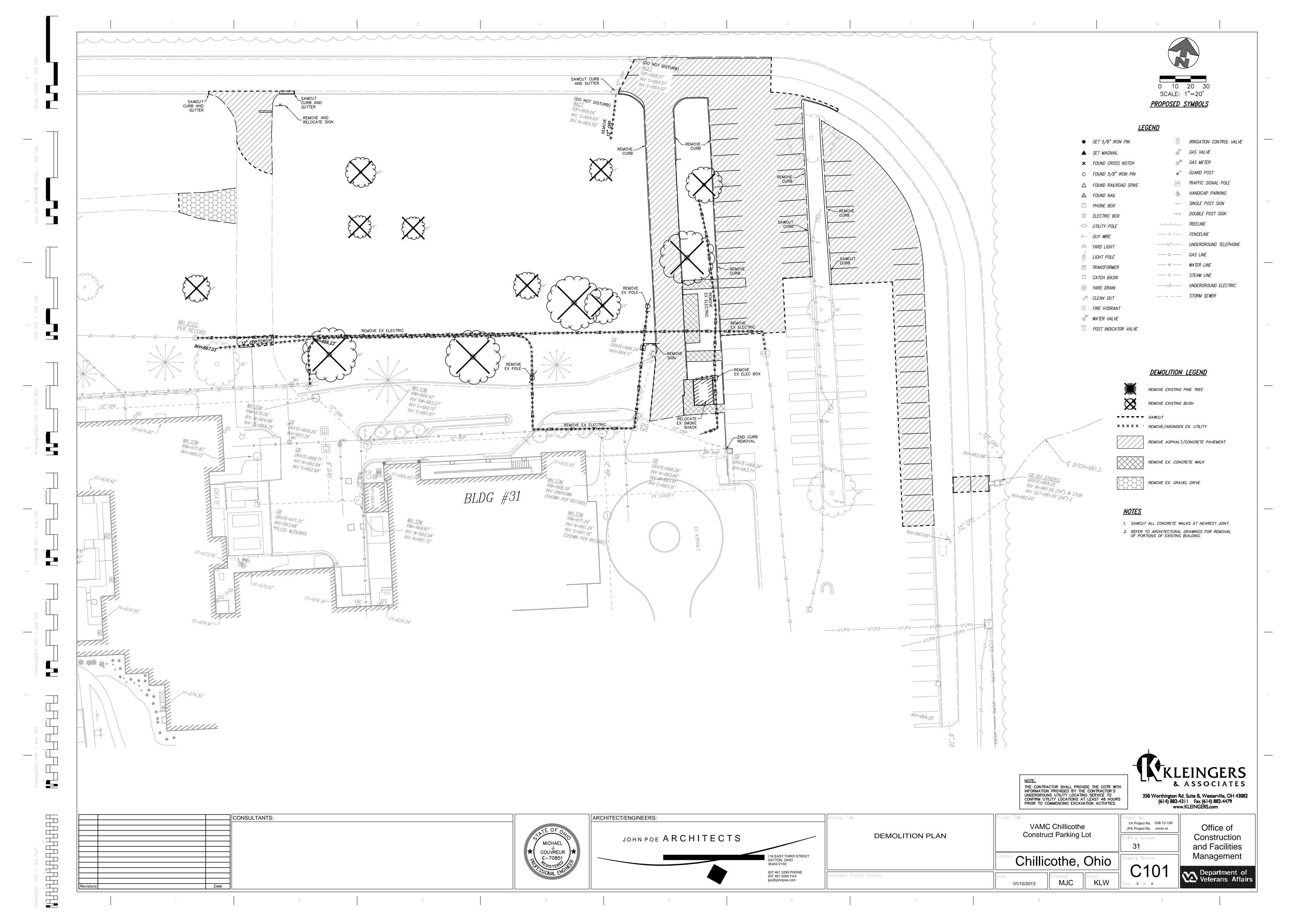
VA Project No. 538-12-109

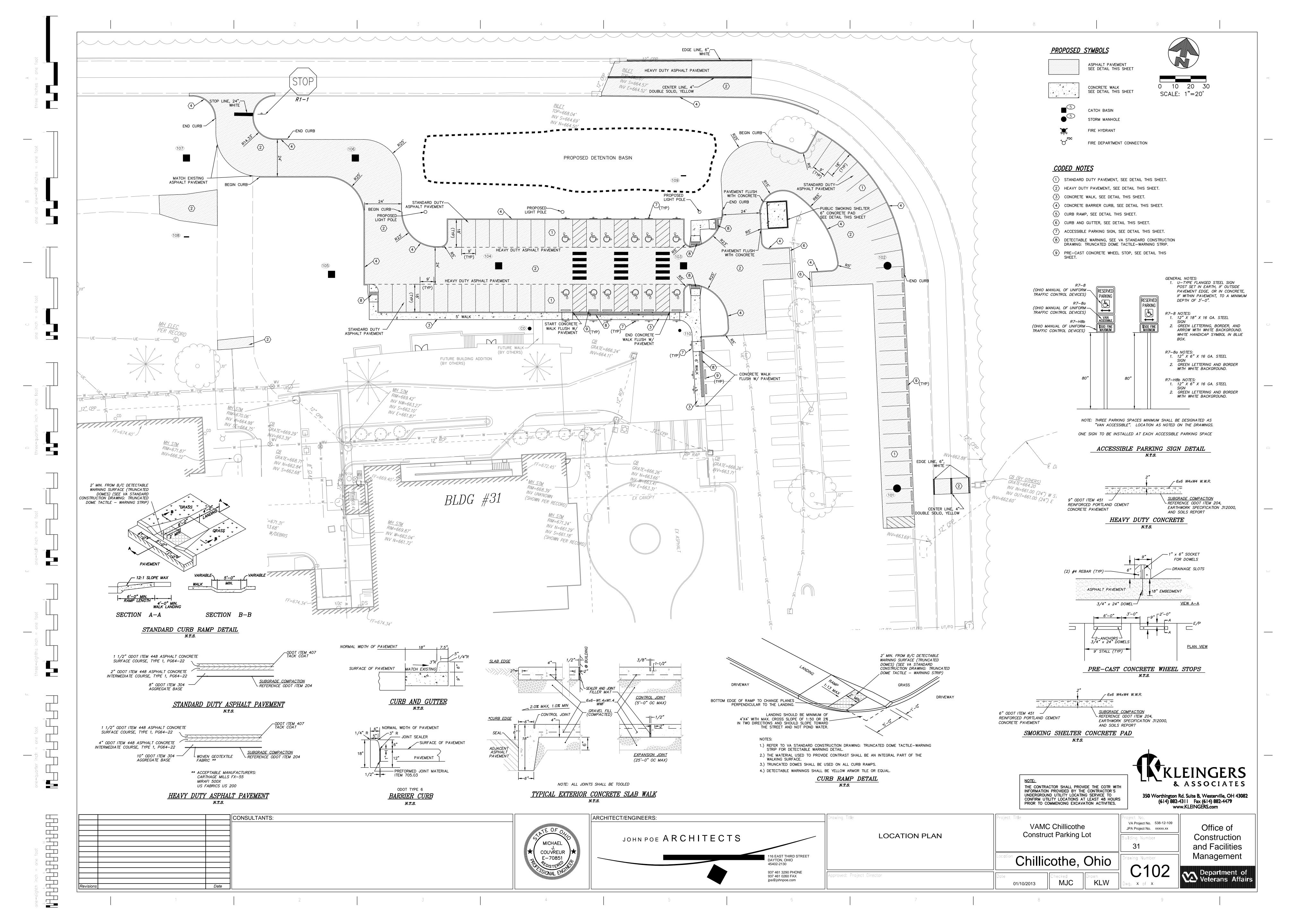
JPA Project No. xxxxx.xx

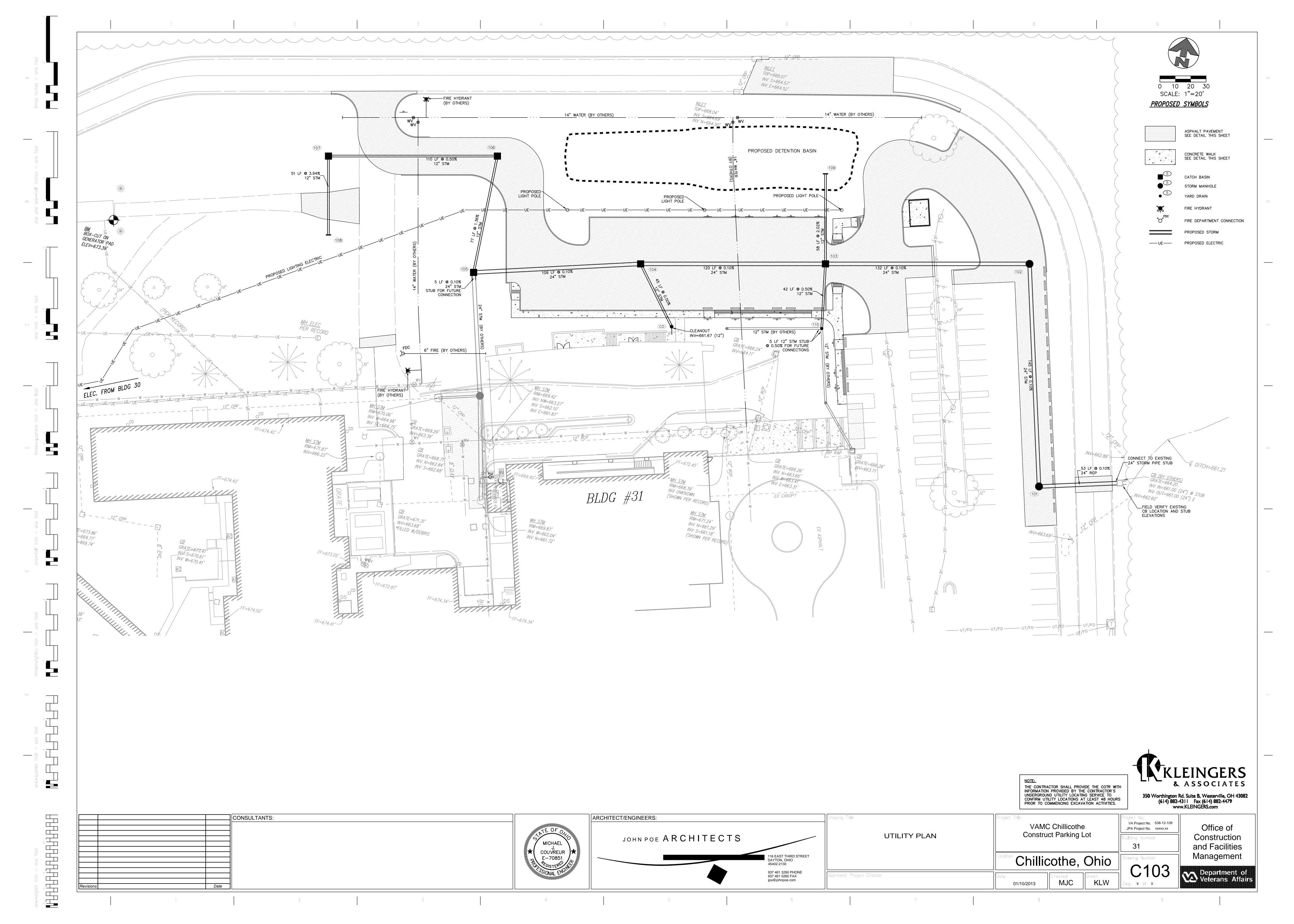
Office of Construction and Facilities Management

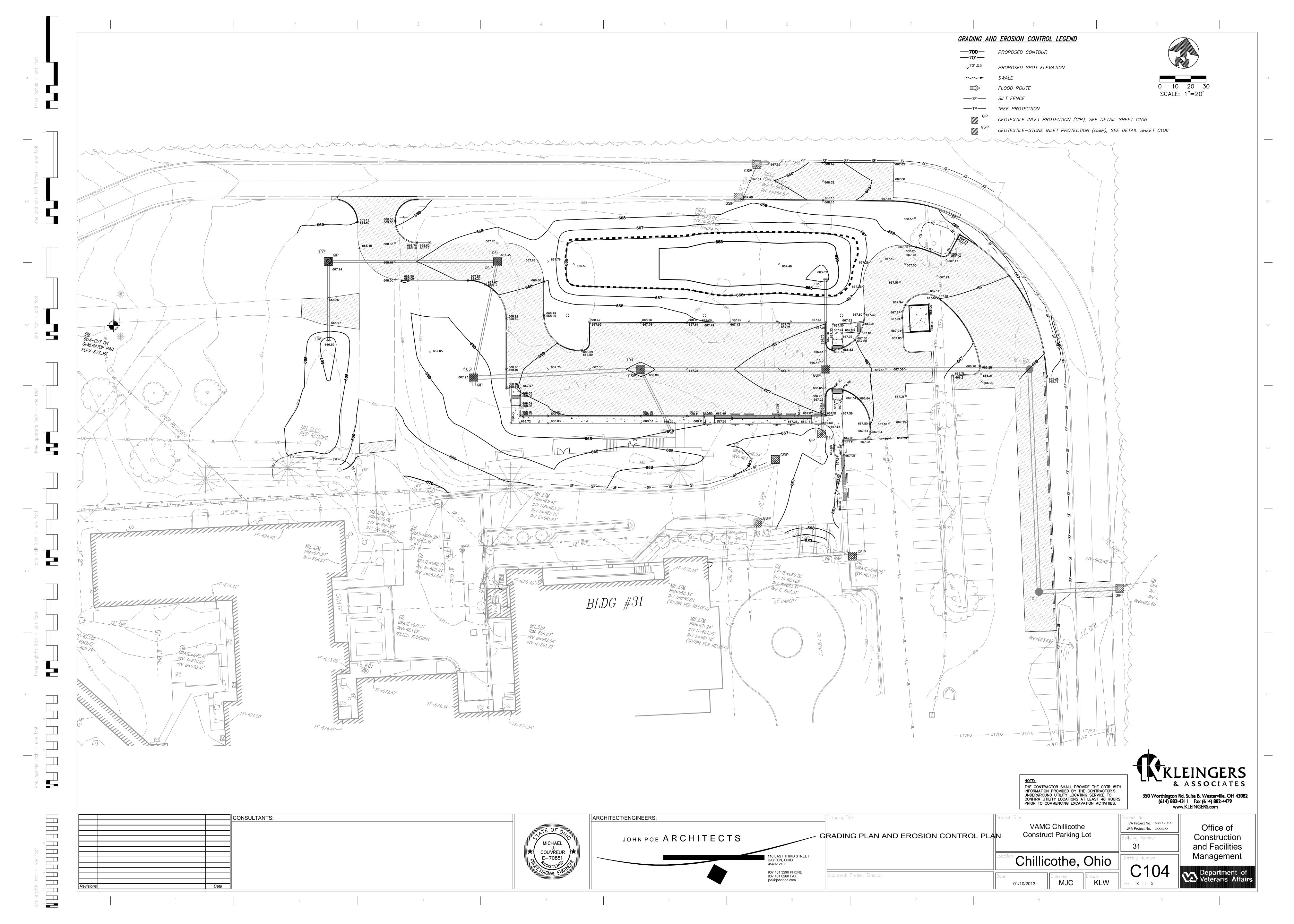
Department of Veterans Affairs

01/10/2013



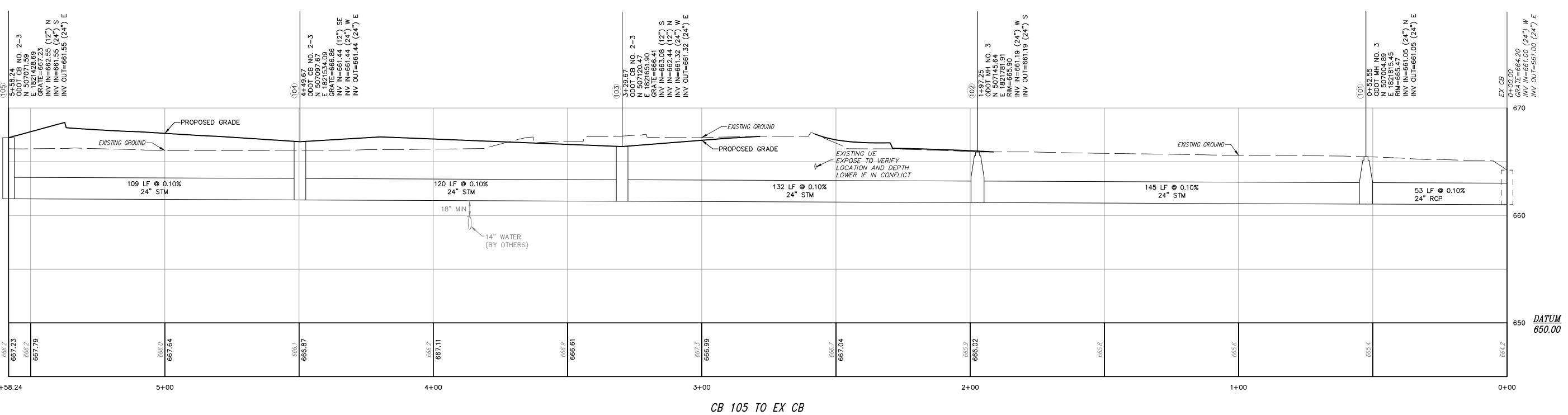






5+58.24 2+00 0+00 3+00 1+00 5+00 4+00 CB 105 TO EX CB \_\_EXISTING GROUND \_\_EXISTING GROUND \_\_EXISTING GROUND PROPOSED GRADE-EXISTING GROUND— LPROPOSED GRADE LPROPOSED GRADE 18" MIN PROPOSED LIGHTING UE 51 LF @ 3.94% 12" STM 110 LF @ 0.50% 18" MIN 77 LF @ 1.36% 12" STM 42 LF @ 0.50% 12" STM 58 LF @ 2.02% 12" STM 14" WATER (BY OTHERS) LPROPOSED LIGHTING UE 650 <u>DATUM</u> 650.00 650 <u>DATUM</u> 650.00 650 <u>DATUM</u> 650.00 30+42.07 20+58.50 CB 108 TO CB 105 HW 109 TO CB 103 YD 110 TO CB 103 KLEINGERS & ASSOCIATES THE CONTRACTOR SHALL PROVIDE THE COTR WITH INFORMATION PROVIDED BY THE CONTRACTOR'S UNDERGROUND UTILITY LOCATING SERVICE TO CONFIRM UTILITY LOCATIONS AT LEAST 48 HOURS PRIOR TO COMMENCING EXCAVATION ACTIVITIES. 350 Worthington Rd. Suite B, Westerville, OH 43082 (614) 882-4311 Fax (614) 882-4479 www.KLEINGERS.com ARCHITECT/ENGINEERS: CONSULTANTS: VA Project No. 538-12-109 VAMC Chillicothe Office of JPA Project No. xxxxx.xx Construct Parking Lot STORM SEWER PROFILES JOHN POE ARCHITECTS Construction and Facilities 31 J. COUVREUR E-70851 Management 116 EAST THIRD STREET DAYTON, OHIO 45402-2130 Chillicothe, Ohio Department of Veterans Affairs 937 461 3290 PHONE 937 461 0260 FAX jpa@johnpoe.com proved: Project Director MJC 01/10/2013 Date

0 10 20 30 SCALE: 1"=5, VERTICAL



#### 1. DESCRIPTION OF CONSTRUCTION:

PARKING LOT ADDITION TO MEDICAL CENTER BUILDING IN ROSS COUNTY, OHIO. INCLUDING THE BUILDING WALKS. STORM SEWERS AND MAIN. WATER LINES, AND OTHER RELATED UTILITIES.

SOIL DISTURBING ACTIVITIES WILL INCLUDE: CLEARING AND GRUBBING, INSTALLATION OF EROSION AND SEDIMENT CONTROLS, GRADING, INSTALLATION OF THE PARKING LOT AND STORM SEWER MAIN AND THE PREPARATION FOR FINAL SEEDING.

### AREA AFFECTED BY CONSTRUCTION:

APPROXIMATELY 2.14 ACRES

#### 3. RUNOFF COEFFICIENTS:

POST: C=0.62

C=0.95 FOR BUILDINGS AND PAVEMENT, C=0.40 FOR OTHER AREAS.

4. ESTIMATE OF THE IMPERVIOUS AREA CREATED BY THE CONSTRUCTION **ACTIVITY:** APPROXIMATELY 0.18 ACRES.

#### 5. EXISTING SOIL DATA:

ELDEAN LOAM, O TO 2 PERCENT SLOPES GESSIE SILT LOAM, OCCASIONALLY FLOODED

## 6. EXISTING LAND USE:

MEDICAL CENTER COMPLEX

#### PROJECT SCHEDULE AND SEQUENCE:

A. INSTALL EROSION CONTROL MEASURES B. GRADE THE SITE AND STOCKPILE TOPSOIL MINIMIZING THE

DISTURBANCE OF EXISTING VEGETATION C. STABILIZE DENUDED AREAS AND STOCKPILES WITHIN 7 DAYS

OF THE LAST CONSTRUCTION ACTIVITY IN THAT AREA D. INSTALL UTILITIES, STORM SEWER

E. COMPLETE CONCRETE WALKS F. COMPLETE GRADING AND INSTALL PERMANENT SEEDING G. WHEN ALL CONSTRUCTION ACTIVITY IS COMPLETE AND THE

SITE IS STABILIZED, REMOVE EROSION CONTROL MEASURES

AND RESEED ANY AREAS DISTURBED BY THEIR REMOVAL

## 8. RECEIVING WATERS:

PRIVATE STORM SEWER TO UNKNOWN TRIBUTARY OF THE SCIOTO RIVER

#### 9. POTENTIAL POLLUTION SOURCES:

THE MAIN POSSIBLE SOURCE OF POLLUTION WOULD COME FROM ANY OF THE SOIL DISTURBING ACTIVITIES DESCRIBED IN ITEM NO. 1

### 10. CONTROL MEASURES FOR STORM WATER RUNOFF, EROSION AND SEDIMENT:

STABILIZATION OF DENUDED AREAS AND SOIL STOCKPILES

PERMANENT OR TEMPORARY SOIL STABILIZATION WILL BE APPLIED TO DENUDED AREAS WITHIN 7 DAYS AFTER FINAL GRADE IS REACHED ON ANY PORTION OF THE SITE. SOIL STABILIZATION WILL ALSO BE APPLIED TO DENUDED AREAS WHICH MAY NOT BE AT FINAL GRADE BUT WILL REMAIN UNDISTURBED FOR MORE THAN 45 DAYS. APPLICABLE PRACTICES INCLUDE VEGETATIVE ESTABLISHMENT, MULCHING, AND THE EARLY APPLICATION OF GRAVEL BASE ON AREAS TO BE PAVED. SOIL STABILIZATION MEASURES WILL BE SELECTED TO BE APPROPRIATE FOR THE TIME OF YEAR, SITE CONDITIONS, AND ESTIMATED DURATION OF USE. SOIL STOCKPILES WILL BE STABILIZED OR PROTECTED WITH SEDIMENT TRAPPING MEASURES TO PREVENT SOIL LOSS.

## ESTABLISHMENT OF PERMANENT VEGETATION

A PERMANENT VEGETATIVE COVER WILL BE ESTABLISHED ON DENUDED AREAS NOT OTHERWISE PERMANENTLY STABILIZED. PERMANENT VEGETATION WILL NOT BE CONSIDERED ESTABLISHED UNTIL A GROUND COVER IS ACHIEVED WHICH IS MATURE ENOUGH TO CONTROL SOIL EROSION SATISFACTORILY AND TO SURVIVE SEVERE WEATHER CONDITIONS. (SEE VEGETATIVE PRACTICES).

## PROTECTION OF ADJACENT PROPERTIES

PROPERTIES ADJACENT TO THE SITE OF LAND DISTURBANCE WILL BE PROTECTED FROM SEDIMENT DEPOSITION. THIS WILL BE ACCOMPLISHED BY PRESERVING A WELL VEGETATED BUFFER STRIP AROUND THE LOWER PERIMETER OF LAND DISTURBANCE, BY INSTALLING PERIMETER CONTROLS SUCH AS SEDIMENT TRAPS, FILTERS OR DIKES, OR SEDIMENT BASINS, OR BY A COMBINATION OF SUCH MEASURES. VEGETATED FILTER STRIPS MAY BE USED ALONE ONLY WHERE RUNOFF IN SHEET FLOW IS EXPECTED. FILTER STRIPS SHOULD BE AT LEAST 15 FEET IN WIDTH. IF AT ANY TIME IT IS FOUND THAT A VEGETATED FILTER STRIP ALONE IS INEFFECTIVE IN STOPPING SEDIMENT MOVEMENT INTO ADJACENT PROPERTY, ADDITIONAL PERIMETER CONTROLS MUST BE PROVIDED.

## TIMING AND STABILIZATION OF SEDIMENT TRAPPING MEASURES

SEDIMENT BASINS, DIVERSIONS, SEDIMENT TRAPS, AND OTHER MEASURES INTENDED TO TRAP SEDIMENT ON-SITE WILL BE CONSTRUCTED AS A FIRST STEP IN GRADING AND BE MADE FUNCTIONAL BEFORE UPSLOPE LAND DISTURBANCE TAKES PLACE. EARTHEN STRUCTURES SUCH AS DAMS, DIKES, AND DIVERSIONS WILL BE SEEDED AND MULCHED AFTER INSTALLATION.

## <u>SEDIMENT BASINS</u>

STORM WATER RUNOFF CONTAINING DAMAGING AMOUNTS OF SEDIMENT SHALL PASS THROUGH A SEDIMENT BASIN OR OTHER SUITABLE SEDIMENT TRAPPING FACILITY.

## CUT AND FILL SLOPES

CUT AND FILL SLOPES WILL BE DESIGNED AND CONSTRUCTED IN A MANNER WHICH WILL MINIMIZE EROSION. SLOPES WHICH ARE FOUND TO BE ERODING EXCESSIVELY WITHIN ONE YEAR OF CONSTRUCTION WILL BE PROVIDED WITH ADDITIONAL SLOPE STABILIZING MEASURES UNTIL THE PROBLEM IS CORRECTED.

## STORM WATER MANAGEMENT

CONCENTRATED STORM WATER RUNOFF LEAVING THE SITE WILL BE DISCHARGED DIRECTLY INTO A WELL DEFINED ADEQUATELY PROTECTED NATURAL OR MAN-MADE OFF SITE RECEIVING CHANNEL OR PIPE. IF NO OFF SITE CHANNEL OR PIPE EXISTS, THE STORM WATER WILL BE DETAINED ON SITE IN A SUITABLE RETENTION/DETENTION FACILITY.

## STABILIZATION OF WATERWAYS AND OUTLETS

ALL ON SITE STORM WATER CONVEYANCE CHANNELS WILL BE DESIGNED

AND CONSTRUCTED TO WITHSTAND THE EXPECTED VELOCITY OF FLOW FROM A 10 YEAR FREQUENCY STORM WITHOUT EROSION, DESIGN FOR A LARGER MAY BE NECESSARY FOR PROTECTION FROM THE STORM WATER FLOW. STABILIZATION ADEQUATE TO PREVENT EROSION WILL ALSO BE PROVIDED AT THE OUTLETS OF ALL PIPES AND PAVED CHANNELS.

**CONSULTANTS** 

Date

#### STORM SEWER INLET PROTECTION

ALL STORM SEWER INLETS WHICH ARE MADE OPERABLE DURING CONSTRUCTION WILL BE PROTECTED SO THAT SEDIMENT-LADEN WATER WILL NOT ENTER THE CONVEYANCE SYSTEM WITHOUT FIRST BEING FILTERED OR OTHERWISE TREATED TO REMOVE SEDIMENT.

WORKING IN OR CROSSING WATERCOURSES

CONSTRUCTION VEHICLES WILL BE KEPT OUT OF WATERCOURSES WHENEVER POSSIBLE. WHERE IN-CHANNEL WORK IS NECESSARY,

## DISPOSAL OF SOLID, SANITARY AND TOXIC WASTE

SOLID. SANITARY AND TOXIC WASTE MUST BE DISPOSED OF IN A PROPER MANNER IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS. IT IS PROHIBITED TO BURN, BURY OR POUR ONTO THE GROUND OR INTO STORM SEWERS ANY SOLVENTS, PAINTS, STAINS, GASOLINE, DIESEL FUEL, USED MOTOR OIL, HYDRAULIC FLUID, ANTIFREEZE, CEMENT CURING COMPOUNDS AND OTHER SUCH TOXIC OR HAZARDOUS WASTES. WASH OUT OF CEMENT TRUCKS SHOULD OCCUR IN DIKED AREAS AWAY FROM ANY DRAINAGE CHANNELS. THE DIKED AREA SHOULD HOLD A VOLUME 110% OF THE LARGEST TANK.

#### CONSTRUCTION ACCESS ROUTES AND PARKING AREAS

WHENEVER CONSTRUCTION VEHICLE ACCESS ROUTES INTERSECT PAVED PUBLIC ROADS, PROVISIONS WILL BE MADE TO MINIMIZE THE TRANSPORT OF SEDIMENT (MUD) BY RUNOFF OR VEHICLE TRACKING ONTO THE PAVED SURFACE. TEMPORARY CONSTRUCTION ROADS WILL FOLLOW THE CONTOUR OF THE NATURAL TERRAIN TO THE EXTENT POSSIBLE. SLOPES SHOULD NOT EXCEED 10 PERCENT. ROADBEDS SHALL BE AT LEAST 14 FEET WIDE FOR ONE-WAY TRAFFIC AND 20 FEET WIDE FOR TWO-WAY TRAFFIC. TEMPORARY PARKING AREAS WILL BE LOCATED ON NATURALLY FLAT AREAS WHENEVER POSSIBLE TO MINIMIZE GRADING. GRADES FOR SAID PARKING AREAS SHOULD BE SUFFICIENT TO PROVIDE DRAINAGE BUT NOT EXCEED 4 PERCENT SLOPE. BOTH TEMPORARY AND PERMANENT ROADS AND PARKING AREAS MAY REQUIRE PERIODIC TOP DRESSING WITH NEW GRAVEL. SEEDED AREAS ADJACENT TO ROADS AND PARKING AREAS WILL BE CHECKED PERIODICALLY TO ENSURE THAT A VIGOROUS STAND OF VEGETATION IS MAINTAINED.

NO CONSTRUCTION TRAFFIC WILL ENTER PUBLIC ROADS DIRECTLY FROM THE SITE EXCEPT THROUGH TEMPORARY OR PERMANENT PAVED ACCESS. ALL VEHICLES AND TIRES SHALL BE CLEANED OF MUD PRIOR TO ENTERING THE PUBLIC ROADS.

#### DISPOSITION OF TEMPORARY MEASURES

ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES WILL BE DISPOSED OF AFTER FINAL SITE STABILIZATION IS ACHIEVED OR AFTER THE TEMPORARY MEASURES ARE NO LONGER NEEDED. TRAPPED SEDIMENT AND OTHER DISTURBED SOIL AREAS RESULTING FROM THE DISPOSITION OF TEMPORARY MEASURES WILL BE PERMANENTLY STABILIZED TO PREVENT EROSION AND SEDIMENTATION.

### <u>MAINTENANCE</u>

ALL TEMPORARY AND PERMANENT EROSION AND SEDIMENT CONTROL MEASURES WILL BE MAINTAINED AND REPAIRED AS NEEDED TO ASSURE CONTINUED PERFORMANCE OF THEIR INTENDED FUNCTION.

## i.e. STORM INLET PROTECTION

INLET STRUCTURES SHALL BE INSPECTED AFTER EACH RAIN AND REPAIRS MADE AS NEEDED. SEDIMENT SHALL BE REMOVED AND THE INLET PROTECTION SHALL BE RESTORED TO ITS ORIGINAL WORKING CONDITION. AT NO TIME SHALL MORE THAN A 2" BUILD UP OF SEDIMENT REMAIN AROUND THE INLET PROTECTION.

#### A HEALTHY GROWTH OF VEGETATION CAN BEST BE MAINTAINED BY FERTILIZING, REMOVING SEDIMENT WHEN FILTER BECOMES CLOGGED, AND BY PREVENTING CONSTRUCTION TRAFFIC FROM

DRIVING ACROSS FILTER STRIPS. i.e. SILT FENCES AND FILTER BARRIERS SILT FENCES AND FILTER BARRIERS SHALL BE INSPECTED

DURING PROLONGED RAINFALL. ANY REQUIRED REPAIRS SHALL BE

## MADE IMMEDIATELY.

IMMEDIATELY.

i.e. STRAW BALE BARRIERS STRAW BALE BARRIERS SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REQUIRED REPAIRS SHALL BE MADE

IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY

THE NPDES PERMIT REQUIRES THAT SEDIMENT AND EROSION CONTROLS BE INSPECTED ONCE EVERY 7 DAYS AND WITHIN 24 HOURS OF 0.5" OR GREATER RAINFALL. A WRITTEN LOG OF THESE INSPECTIONS MUST BECOME PART OF THE SWP3. THIS LOG SHOULD INDICATE THE DATES OF THE INSPECTIONS, NAME OF THE INSPECTOR, WEATHER CONDITIONS, OBSERVATIONS, ACTIONS TAKEN TO CORRECT ANY PROBLEMS AND THE DATE THE ACTION WAS TAKEN.

## 11. VEGETATIVE PRACTICES

THE FOLLOWING CHART APPLIES WHEN ESTABLISHING NEW SEEDINGS.

#### SEEDING MIXTURE AND SITE SUITABILITY CHART SOIL SUITABILITY

SEEDING MIXTURE1 / RATE lbs/acre WET2 / WELL DRAINED3/

1. Alfalfa4/	10		*
or Red Clover plus	10		
Timothy	4		
or Orchardgrass	6		
or Bromegrass	6		
2. Ladino Clover4/	1/2	*	*
Timothy	4		
or Orchardgrass	6		
or Bromegrass	8		
3. Tall Fescue	40	*	*
4. Reed Canarygrass plus	15	*	
Tall Fescue	10		
· ·			

- 1/ ALL PERMANENT SEEDING SHALL BE COMPLETED BETWEEN APRIL 1 TO MAY 15, OR AUGUST 15 TO SEPTEMBER 30. IF AN ALTERNATE SEEDING TIME IS NECESSARY, FOLLOW THE SPECIFICATIONS CONTAINED IN CRITICAL AREA PLANTING -DORMANT SEEDING FOR METHODS, TIMING AND RATE
- 2/ INCLUDES SITES WHICH ARE EXCESSIVELY WET ONLY A PORTION

OF THE GROWING SEASON.

- 3/ INCLUDES SITES WHICH ARE WELL DRAINED WITH TILE; ALSO NATURALLY WELL DRAINED AND DROUGHT SITES.
- 4/ MIXTURES 1 AND 2 ARE MORE DESIRABLE FOR WILDLIFE

#### <u>VEGETATIVE STREAM BANK STABILIZATION (VSS)</u>

TO PROTECT THE BANKS OF CREEKS, STREAMS, AND RIVERS WHICH ARE, OR MAY BE AFFECTED BY EXCESS RUNOFF FROM CONSTRUCTION

#### TREES AND BRUSH THAT WILL AFFECT THE GROWTH OF DESIRABLE VEGETATION WILL BE REMOVED.

PRIOR TO SEEDING OR PLANTING, CLEAR THE STREAM CHANNEL OF FALLEN TREES, STUMPS, AND OTHER DEBRIS THAT MAY FORCE

#### STREAMFLOW INTO STREAMBANK. WHERE NECESSARY THE STREAM BANK SIDE SLOPE SHALL BE CUT BACK TO A 2:1 SLOPE OF FLATTER AND REMOVE OVERHANGING BANK EDGES.

THE SEEDED SHALL BE ROUGHENED WITH A RAKE OR SIMILAR TOOL

AND FERTILIZED WITH 100 lbs. PER ACRE OF 15-15-15 OR

#### EQUIVALENT (24 lbs./100 SQ. FT.). **GRASS SELECTION AND ESTABLISHMENT:**

- A. TALL FESCUE--SEED AT A RATE OF 40 lbs./ACRE (1 lb./100 SQ. FT.) AND MULCH WITH STRAW AT A RATE OF 2 TONS PER ACRE (90 lbs./1000 SQ. FT.). ESTABLISH BETWEEN APRIL 1 TO MARCH 15 OR AUGUST 1 TO SEPTEMBER 30. COVER THE SEED 1/4-1/2 INCH BY RAKE OR SIMILAR TOOL. THIS IS THE MOST WIDELY USED AND BEST ADAPTED GRASS FOR STREAM BANK SEEDINGS. ITS HAS GOOD TOLERANCE TO WET SOILS AND FLOODING. IT IS ALSO WELL ADAPTED TO WELL DRAINED SOILS.
- B. REED CANARYGRASS (PHALARIS ARUNDINACAE) PLUS TALL FESCUE--SEED THE REED CANARYGRASS AT A RATE OF 15 lbs./ACRE (1/3 lb./1000 SQ. FT.), PLUS 10 lbs./ACRE (1/4 Ib./1000 SQ. FT.) OF TALL FESCUE. MULCH WITH STRAW AT A RATE OF 2 TONS/ACRE (90 lbs./1000 SQ. FT.). THIS MIXTURE SHOULD ONLY BE SEEDED FROM MARCH 1 TO MAY 15, OR AUGUST 15 TO SEPTEMBER 30. COVER THE SEED 1/4-1/2 INCH BY RAKING OR SIMILAR TOOL. THIS MIXTURE IS ADAPTABLE TO SOILS THAT ARE VERY WET AS WELL AS WELL DRAINED SOIL CONDITIONS. REED CANARYGRASS CAN WITHSTAND EXTENDED PERIODS OF FLOODING. IT IS EXCELLENT FOR EROSION CONTROL. REED CANARYGRASS CAN ALSO BE ESTABLISHED BY SOD STRIPS, USING RHIZIMES, OR FRESHLY CUT CULMS. THE LOCAL CONSERVATION SERVICE OFFICE CAN PROVIDE THE SPECIFIC DETAILS REQUIRED

TO USE ONE OF THE ALTERNATIVE ESTABLISHMENT METHODS.

#### 12. FINAL SITE STABILIZATION

FINAL SITE STABILIZATION IS CONSIDERED ACHIEVED ONCE ALL TEMPORARY EROSION AND SEDIMENT CONTROL PRACTICES ARE REMOVED AND DISPOSED OF AND ALL TRAPPED SEDIMENT HAS BEEN PERMANENTLY STABILIZED TO PREVENT FURTHER EROSION.

16" MİNIMUM

16" MİNIMUM

SECTIONS

LAND DISTURBANCE BEGINS.

DISSIPATED ALONG ITS LENGTH.

HIGHER ELEVATION.

FLATTEST AREA AVAILABLE.

OF SILT FENCE

1. SILT FENCE SHALL BE CONSTRUCTED BEFORE UPSLOPE

2. ALL SILT FENCE SHALL BE PLACED AS CLOSE TO THE

CONTOUR AS POSSIBLE SO THAT WATER WILL NOT

CONCENTRATE AT LOW POINTS IN THE FENCE AND SO

SMALL CONCENTRATED FLOWS TO THE SILT FENCE ARE

TO PREVENT WATER PONDED BY THE SILT FENCE FROM

CONSTRUCTED UPSLOPE SO THAT THE ENDS ARE AT A

WHERE POSSIBLE, SILT FENCE SHALL BE PLACED ON THE

3. WHERE POSSIBLE, VEGETATION SHALL BE PRESERVED FOR 5 FT.

4. THE HEIGHT OF THE SILT FENCE SHALL BE A MINIMUM OF 16 IN.

5. THE SILT FENCE SHALL BE PLACED IN A TRENCH CUT A MINIMUM

6. THE SILT FENCE SHALL BE PLACED WITH THE STAKES ON THE

OF 6 IN. DEEP. THE TRENCH SHALL BE CUT WITH A TRENCHER,

CABLE LAYING MACHINE. OR OTHER SUITABLE DEVICE WHICH WILL

DOWNSLOPE SIDE OF THE GEOTEXTILE AND SO THAT 8 IN. OF CLOTH

ARE BELOW THE GROUND SURFACE. EXCESS MATERIAL SHALL LAY

ON THE BOTTOM OF THE 6-IN.-DEEP TRENCH. THE TRENCH SHALL

7 DAYS FROM THE INSTALLATION OF THE SILT FENCE.

ENSURE AN ADEQUATELY UNIFORM TRENCH DEPTH.

ABOVE THE ORIGINAL GROUND SURFACE.

BE BACKFILLED AND COMPACTED.

(OR AS MUCH AS POSSIBLE) UPSLOPE FROM THE SILT FENCE.

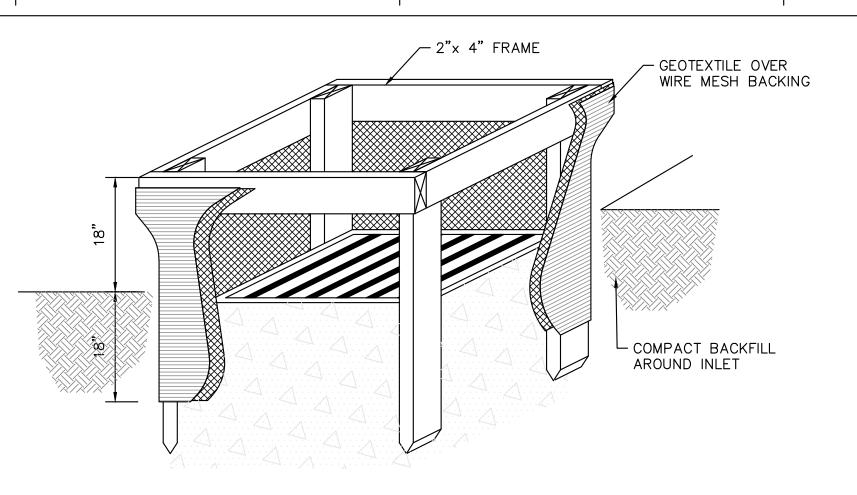
IF VEGETATION IS REMOVED, IT SHALL BE REESTABLISHED WITHIN

FLOWING AROUND THE ENDS, EACH END SHALL BE

THAT SMALL SWALES OR DEPRESSIONS WHICH MAY CARRY

WRAP GEOTEXTILE AROUND STAKES

BEFORE DRIVING



### GEOTEXTILE INLET PROTECTION (GIP)

TRENCH TO BE

AND COMPACTED

7. SEAMS BETWEEN SECTION OF SILT FENCE SHALL BE OVERLAPPED

8. MAINTENANCE--SILT FENCE SHALL ALLOW RUNOFF TO PASS

ONE OF THE FOLLOWING SHALL BE PERFORMED, AS

BEFORE DRIVING INTO THE GROUND.

9. CRITERIA FOR SILT FENCE MATERIALS

MINIMUM TENSILE STRENGTH...

MINIMUM PUNCTURE STRENGTH.

MINIMUM TEAR STRENGTH ..

MINIMUM BURST STRENGTH

APPARENT OPENING SIZE.

MINIMUM PERMITTIVITY ..

MAXIMUM ELONGATION AT 60 LBS

APPROPRIATE:

WITH THE END STAKES OF EACH SECTION WRAPPED TOGETHER

ONLY AS DIFFUSE FLOW THROUGH THE GEOTEXTILE. IF RUNOFF

ENDS, OR IN ANY OTHER WAY BECOMES A CONCENTRATED FLOW,

2) ACCUMULATED SEDIMENT SHALL BE REMOVED

1) FENCE POSTS--THE LENGTH SHALL BE A MINIMUM OF 32 IN.

LONG. WOOD POSTS WILL BE 2-BY-2-IN. HARDWOOD OF SOUND

FABRIC PROPERTIES

ULTRAVIOLET EXPOSURE STRENGTH RETENTION........... 70%

..120 LBS

50 LBS

40 LBS

. 200 PSI

< 0.84MM

1X10<sup>-2</sup> SEC <sup>-1</sup>

QUALITY. THE MAXIMUM SPACING BETWEEN POSTS SHALL BE 10

2) SILT FENCE FABRIC SHALL BE ODOT TYPE C GEOTEXTILE

FABRIC OR AS DESCRIBED IN THE CHART BELOW:

3) OTHER PRACTICES SHALL BE INSTALLED.

1) THE LAYOUT OF THE SILT FENCE SHALL BE CHANGED

OVERLAPS THE SILT FENCE, FLOWS UNDER OR AROUND THE

BACKFILLED

-----10' MAXIMUM-------

LEVEL CONTOUR

NO SLOPE

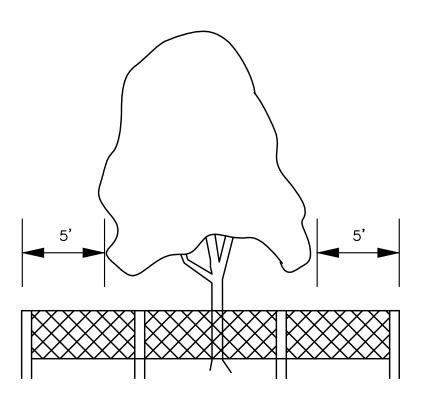
ELEVATION

SILT FENCE (SF)

FLAT SLOPE IN -

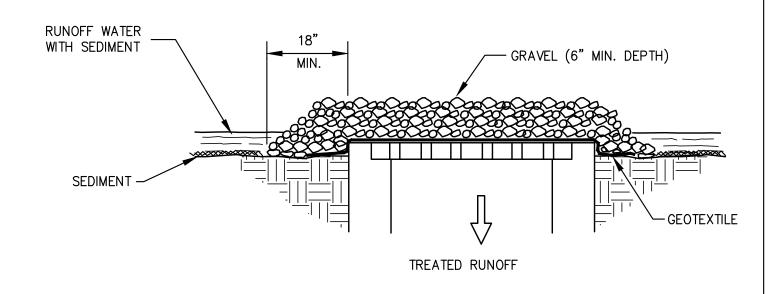
FRONT OF BARRIER

- 1. INLET PROTECTION SHALL BE CONSTRUCTED EITHER BEFORE UPSLOPE LAND DISTURBANCE BEGINS OR BEFORE THE STORM DRAIN BECOMES OPERATIONAL.
- 2. THE EARTH AROUND THE INLET SHALL BE EXCAVATED COMPLETELY TO A DEPTH AT LEAST 18
- 3. THE WOODEN FRAME SHALL BE CONSTRUCTED OF 2-BY-4-IN. CONSTRUCTION-GRADE LUMBER. THE 2-BY-4-IN. POSTS SHALL BE DRIVEN 1 FT. INTO THE GROUND AT FOUR CORNERS OF THE INLET AND THE TOP PORTION OF 2-BY-4-IN. FRAME ASSEMBLED USING THE OVERLAP JOINT SHOWN. THE TOP OF THE FRAME SHALL BE AT LEAST 6 IN. BELOW ADJACENT ROADS IF PONDED WATER WOULD POSE A SAFETY HAZARD TO TRAFFIC.
- 4. WIRE MESH SHALL BE OF SUFFICIENT STRENGTH TO SUPPORT FABRIC WITH WATER FULLY IMPOUNDED AGAINST IT. IT SHALL BE STRETCHED TIGHTLY AROUND THE FRAME AND FASTENED SECURELY TO THE FRAME.
- 5. GEOTEXTILE SHALL HAVE AN EQUIVALENT OPENING SIZE OF 20-40 SIEVE AND BE RESISTANT TO SUNLIGHT. IT SHALL BE STRETCHED TIGHTLY
- THE FRAME AND FASTENED SECURELY. IT SHALL EXTEND FROM THE TOP OF THE FRAME TO 18 IN. BELOW THE INLET NOTCH ELEVATION. THE GEOTEXTILE SHALL OVERLAP ACROSS ONE SIDE OF THE INLET SO THE ENDS OF THE CLOTH ARE NOT FASTENED TO THE SAME POST.
- 6. BACKFILL SHALL BE PLACED AROUND THE INLET IN COMPACTED 6-IN. LAYERS UNTIL THE EARTH IS EVEN WITH NOTCH ELEVATION ON ENDS AND TOP ELEVATION ON SIDES.
- 7. A COMPACTED EARTH DIKE OR A CHECK DAM SHALL BE CONSTRUCTED IN THE DITCH LINE BELOW THE INLET IF THE INLET IS NOT IN A DEPRESSION AND IF RUNOFF BYPASSING THE INLET WILL NOT FLOW TO A SETTLING POND. THE TOP OF EARTH DIKES SHALL BE AT LEAST 6 IN. HIGHER THAN THE TOP OF THE FRAME.



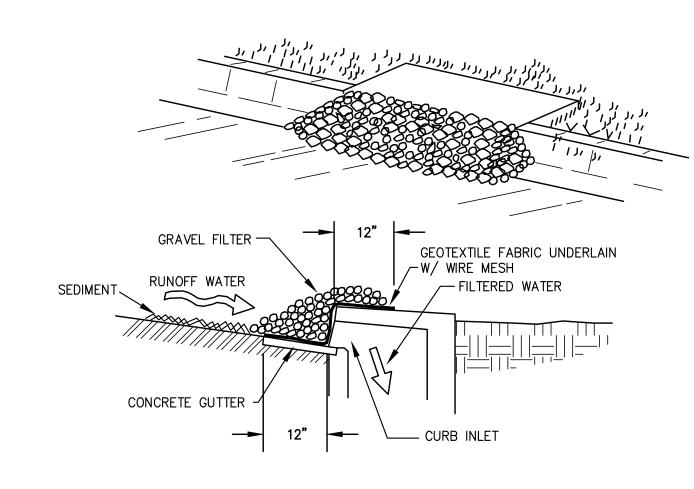
#### PROTECTION OF EXISTING TREES AND VEGETATION:

PROTECT EXISTING TREES AND OTHER VEGETATION INDICATED TO REMAIN IN PLACE AGAINST UNNECESSARY CUTTING, BREAKING OR SKINNING OF ROOTS, SKINNING OR BRUISING OF BARK, SMOTHERING OF TREES BY STOCKPILING CONSTRUCTION MATERIALS OR EXCAVATED MATERIALS WITHIN DRIP LINE, EXCESS FOOT OR VEHICULAR TRAFFIC, OR PARKING OF VEHICLES WITHIN DRIP LINE. PROVIDE TEMPORARY GUARDS TO PROTECT TREES AND AND VEGETATION TO BE LEFT STANDING.



### GEOTEXTILE-STONE INLET PROTECTION (GSIP)

- 1. INLET PROTECTION SHALL BE CONSTRUCTED EITHER BEFORE UPSLOPE LAND DISTURBANCE BEGINS OR BEFORE THE INLET BECOMES FUNCTIONAL.
- 2. GEOTEXTILE AND/OR WIRE MATERIAL SHALL BE PLACED OVER THE TOP OF THE STORM SEWER AND APPROXIMATELY SIX (6) INCHES OF 2-INCH OR SMALLER CLEAN AGGREGATE PLACED ON TOP. EXTRA SUPPORT FOR GEOTEXTILE IS PROVIDED BY PLACING HARDWARE CLOTH OR WIRE MESH ACROSS THE INLET COVER. THE WIRE SHOULD BE NO LARGER THAN 1/2" MESH AND SHOULD EXTEND AN EXTRA 12 INCHES ACROSS THE TOP AND SIDES OF THE INLET COVER.
- 3. MAINTENANCE MUST BE PERFORMED REGULARLY, ESPECIALLY AFTER STORM EVENTS. WHEN CLOGGING OF THE STONE OR GEOTEXTILE OCCURS, THE MATERIAL MUST BE REMOVED AND REPLACED.



#### GRAVEL-STONE INLET PROTECTION FOR CURB INLETS (GSIP)

- 1. SEE GRAVEL CURB INLET SEDIMENT FILTER DETAIL
- 2. THIS METHOD OF INLET PROTECTION IS APPLICABLE AT CURB INLETS WHERE PONDING IN FRONT OF THE STRUCTURE IS NOT LIKELY TO CAUSE INCONVENIENCE OR DAMAGE TO ADJACENT STRUCTURES AND UNPROTECTED AREAS.
- 3. HARDWARE CLOTH OR COMPARABLE WIRE MESH WITH 1/2 INCH OPENINGS SHALL BE PLACED OVER THE CURB INLET OPENING SO THAT AT LEAST 12 INCHES OF WIRE EXTENDS ACROSS THE INLET COVER AND AT LEAST 12 INCHES OF WIRE EXTENDS ACROSS THE CONCRETE GUTTER FROM THE INLET OPENING.
- 4. ODOT No. 1 COARSE AGGREGATE SHALL BE PILED AGAINST THE WIRE SO AS TO ANCHOR IT AGAINST THE GUTTER AND INLET COVER AND TO COVER THE INLET OPENING COMPLETELY.
- 5. IF STONE FILTER BECOMES CLOGGED WITH SEDIMENT SO THAT IT NO LONGER ADEQUATELY PERFORMS ITS FUNCTION, THE STONE MUST BE PULLED AWAY FROM THE BLOCK, CLEANED AND REPLACED.



## THE CONTRACTOR SHALL PROVIDE THE COTR WITH INFORMATION PROVIDED BY THE CONTRACTOR'S UNDERGROUND UTILITY LOCATING SERVICE TO CONFIRM UTILITY LOCATIONS AT LEAST 48 HOURS PRIOR TO COMMENCING EXCAVATION ACTIVITIES.

www.KLEINGERS.com VA Project No. 538-12-109





EROSION CONTROL NOTES AND DETAILS

VAMC Chillicothe Construct Parking Lot

Chillicothe, Ohio

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JPA Project No. xxxxx.xx

Construction and Facilities Management

Office of

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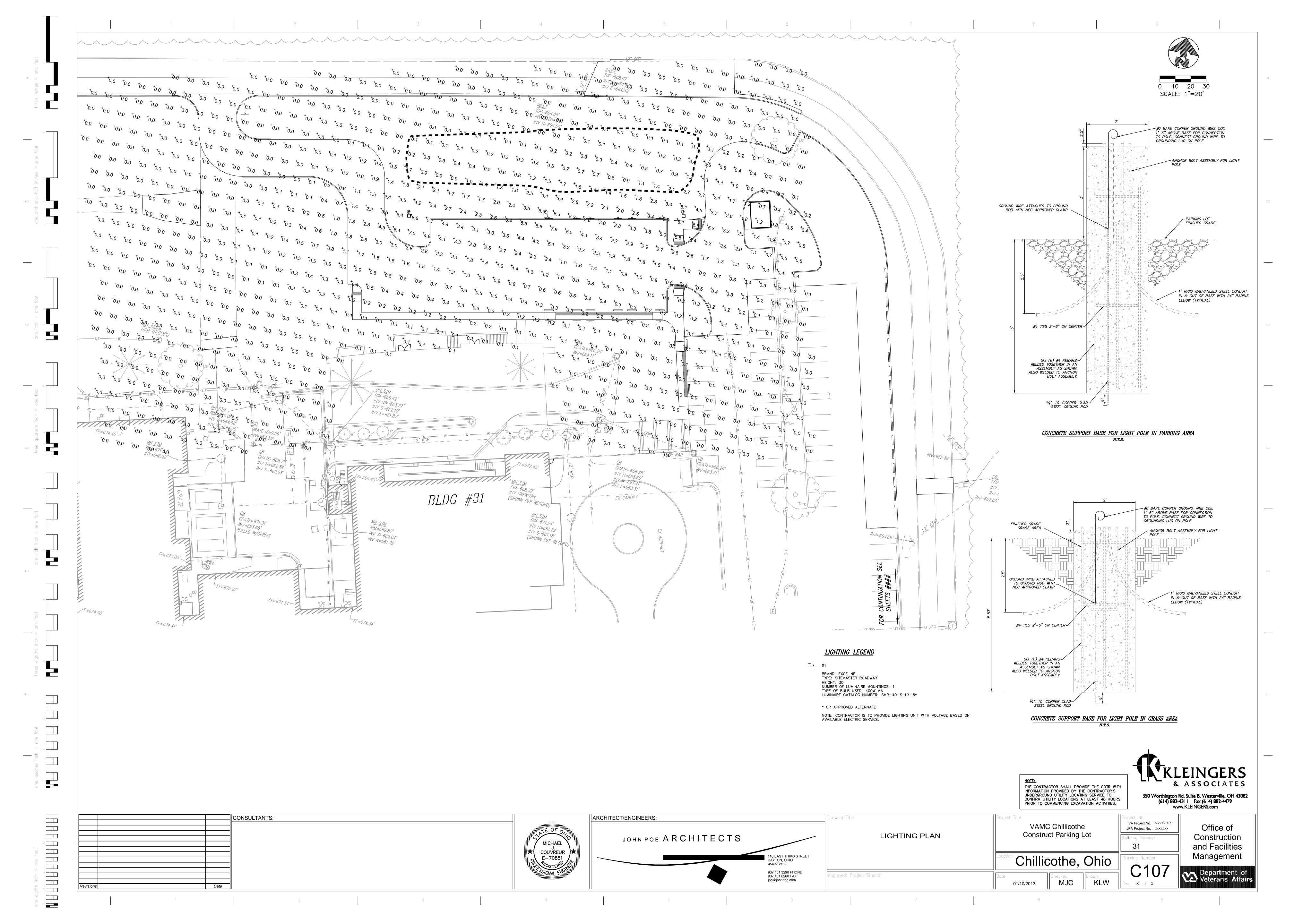
Department of Veterans Affairs

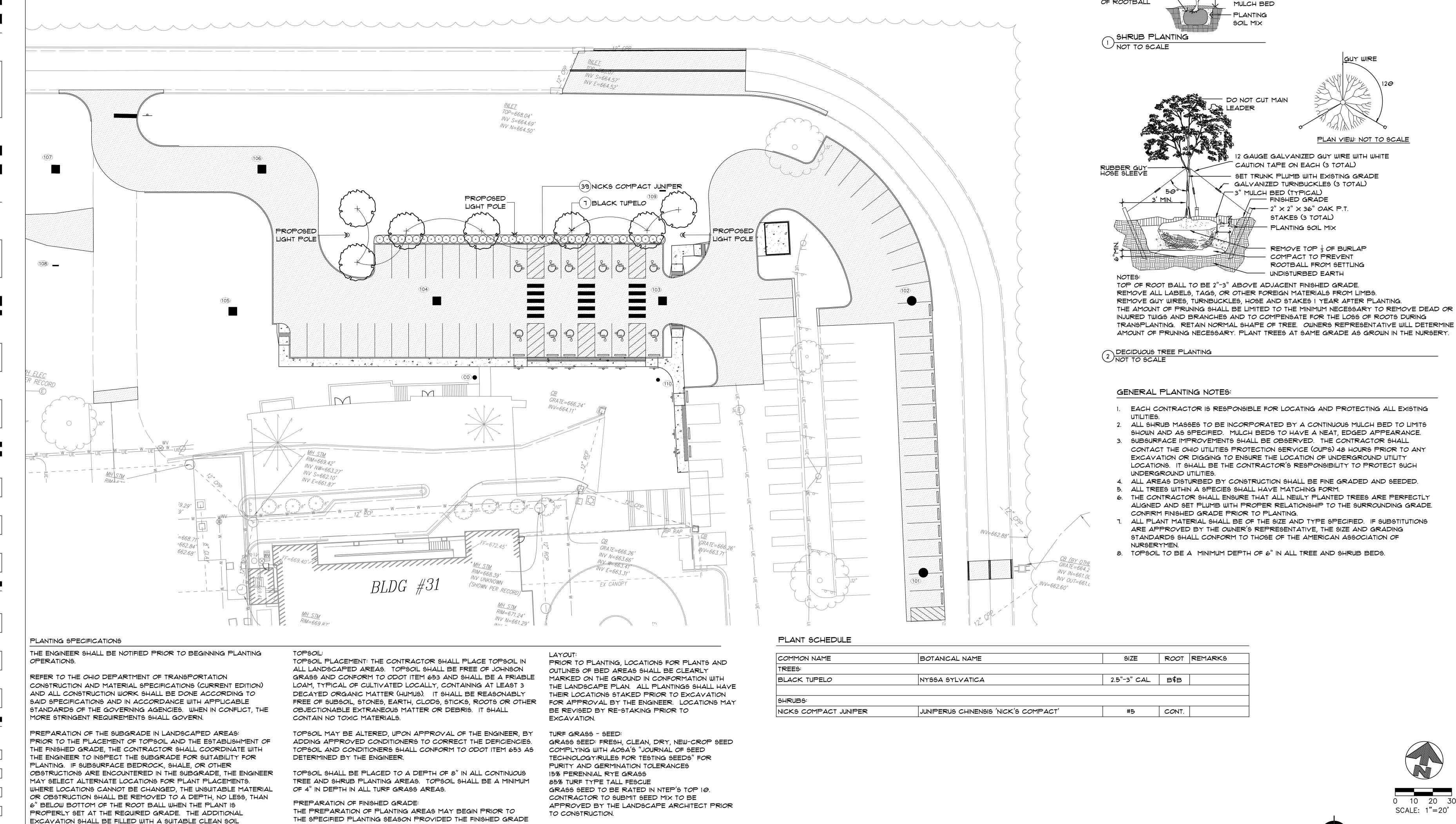
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awina litle

01/10/2013

MJC





KLEINGERS & ASSOCIATES

THE CONTRACTOR SHALL PROVIDE THE COTR WITH INFORMATION PROVIDED BY THE CONTRACTOR'S UNDERGROUND UTILITY LOCATING SERVICE TO CONFIRM UTILITY LOCATIONS AT LEAST 48 HOURS PRIOR TO COMMENCING EXCAVATION ACTIVITIES.

VAMC Chillicothe Construct Parking Lot

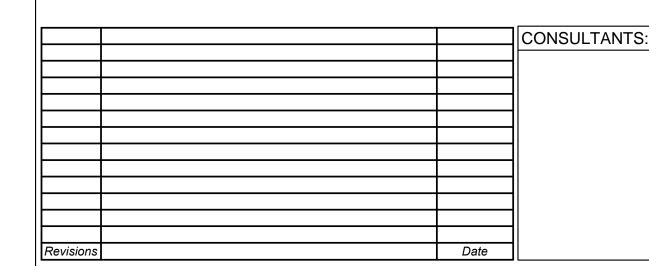
NOTE:

REMOVE BURLA FROM UPPER 1/3

OF ROOTBALL

- 2" BARK

350 Worthington Rd. Suite B, Westerville, OH 43082 (614) 882-4311 Fax (614) 882-4479 www.KLEINGERS.com VA Project No. 538-12-109 JPA Project No. xxxxx.xx



MATERIAL FREE OF ROCK AND CONSTRUCTION DEBRIS AND

ENGINEER.

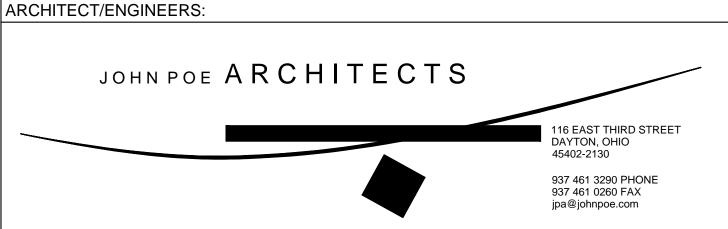
SUITABLE FOR THE PLANTING SUBGRADE AS DETERMINED BY THE



HAS BEEN ESTABLISHED AND APPROVED BY THE ENGINEER, AND

PROVIDED THAT IN THE JUDGEMENT OF THE ENGINEER, THE

GENERAL CONSTRUCTION WORK IS SUFFICIENTLY ADVANCED.



LANDSCAPE PLAN

awina litle

proved: Project Director

Chillicothe, Ohio

Office of Construction and Facilities Management

MJC 01/10/2013

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Department of Veterans Affairs